

[Handwritten signature]



CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, Alexandria, VA 22313-1450, on 11 April 2006

Wendy Scott

(Typed or Printed Name of Person Mailing Paper or Fee)

[Handwritten signature of Wendy Scott]

(Signature of Person Mailing Paper or Fee)

Attorney Docket No.: SUN-P9330-MEG

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97

Inventor: Marc Tremblay, et al.
Title: SELECTIVELY UNMARKING LOAD-MARKED CACHE LINES DURING TRANSACTIONAL PROGRAM EXECUTION
Filing Date: 23 January 2004
Serial Number: 10/764,412
Group Art Unit: 2186
Examiner: Patel, Hetul B.

Listed below or on an attached Form PTO-1449 is information known to applicant(s) and submitted pursuant to 37 C.F.R. §1.56. A copy of each listed publication and U.S. and foreign patent, except for pending U.S. applications, is being submitted herewith, along with a concise explanation of information in a foreign language, if any, pursuant to 37 C.F.R. §1.97-1.98.

Applicants respectfully request that the listed information be considered by the Examiner and be made of record in the above-identified application. If form PTO-1449 is enclosed, the Examiner is requested to initial and return it in accordance with MPEP §609.

This statement is not intended to represent that a search has been made or that the information cited in the statement is, or is considered to be, material to patentability as defined in §1.56.

— This statement qualifies under 37 C.F.R. §1.97, subsection (b) because (check all that apply):

- (1) It is being filed within 3 months of the application filing date
— OR —
- (2) It is being filed within 3 months of entry of a national stage
— OR —
- (3) It is being filed before the mail date of the first Office Action on the merits.

— 37 C.F.R. §1.97(c). If this statement is being filed after the latest of: (1) three months beyond the filing date of a national application; (2) three months beyond the date of entry of the national stage as set forth in §1.491 in an international application; or (3) the mailing date of a first Office action on the merits, but before the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, then:

— a certification as specified in §1.97(e) is provided below; **or**

— a fee of \$240.00 as set forth in 1.17(p) is authorized below, enclosed, or included with the payment of other papers filed together with this statement. Please note that a check in the amount of \$240.00 is enclosed in payment.

— 37 C.F.R. §1.97(d). If this statement is being filed after the mailing date of the earlier of a final office action under §1.113 or a notice of allowance under §1.311, but before payment of the issue fee, then:

A. a certification as specified in §1.97(e) is completed below; **and**

B. a petition under 37 C.F.R. §1.97(d) requesting consideration of this statement is submitted herewith; **and**

C. a fee of \$130.00 as set forth in §1.17(i)(1) is authorized below, enclosed, or included with the payment of other papers filed together with this statement.


X This statement is being filed after the payment of the issue fee but before issuance of the patent.

— Statement under 37 C.F.R. 1.97(e) - I hereby certify that either: each item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign patent application not more than three months prior to the filing of the information disclosure statement; or no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign patent application, and, to the knowledge of the person signing the statement after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in section 1.56(c) more than three months prior to the filing of the information disclosure statement.

Signature: _____
A. Richard Park (Reg. No. 41,241)

Date

Respectfully submitted,

By: 
A. Richard Park
Reg. No. 41,241

PARK, VAUGHAN & FLEMING LLP
2820 Fifth Street
Davis, CA 95616
Telephone (530) 759-1661
Facsimile (530) 759-1665
Date: 11 April 2006

INFORMATION DISCLOSURE
CITATION

PTO-1449

ATTY. DOCKET NO.
SUN-P9330APPLICATION NO.
10/764,412APPLICANT
Marc Tremblay, et al.FILING DATE
23 January 2004GROUP ART UNIT
2186

U.S. PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE |
|------------------------|--------------|---------|-----------------|-------|----------|----------------|
| | 6,460,124 | 10-2002 | Kagi et al. | 711 | 163 | |
| | 2002/0087810 | 07-2002 | Boatright et a. | 711 | 145 | |
| | 2004/0186970 | 09-2004 | Kekre et al. | 711 | 62 | |
| | 6,578,088 | 06-2003 | Singhal et al. | 707 | 8 | |
| | 5,940,827 | 08-1999 | Hapner et al | 707 | 8 | |
| | | | | | | |
| | | | | | | |
| | | | | | | |

FOREIGN PATENT DOCUMENTS

| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
|------------------------|------------|------|---------|-------|----------|-------------|----|
| | | | | | | Yes | No |
| | | | | | | | |

OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

| | |
|--|--|
| | Publication entitled "Speculation-Based Techniques for Transactional Lock-Free Execution of Lock-Based Programs", by Ravi Rajwar, Online! 2002, XP002286237, Retrieved from the internet: URL: http://bbcr.uwaterloo.ca/~brecht/courses/856/readings-new/rajwar02speculationsbased.pdf |
| | Publication entitled "Checkpoint Processing and Recovery: Towards Scalable Large Instruction Window Processors", by Haitham Akkary et al., Proceedings of the 36 th International Symposium on Microarchitecture, 2003, IEEE |
| | Publication entitled "Multiple Reservations and the Oklahoma Update", by Janice M. Stone et al., IEEE Parallel & Distributed Technology, November 1993, Pages 58-71. |

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | | | |
|--|--|---------|------------------|------------------------------------|----------|-------------------------------|----|
| INFORMATION DISCLOSURE CITATION PTO-1449 | | | | ATTY. DOCKET NO. SUN-P9330 | | APPLICATION NO. 10/764,412 | |
| | | | | APPLICANT Marc Tremblay, et al. | | | |
| | | | | FILING DATE 23 January 2004 | | GROUP ART UNIT 2186 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE | |
| | 2002/0178349 | 11-2002 | Shibayama et al. | 712 | 235 | | |
| | 6,681,311 | 01-2004 | Gaskins, et al. | 711 | 203 | | |
| | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
| | | | | | | Yes | No |
| | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.). | | | | | | | |
| | Publication entitled "Improving the Throughput of Synchronization by Insertion of Delays", by Ravi Rajwar et al. Proceedings of the Sixth International Symposium on High-Performance Computer Architecture, 8-12 January 2000, Pages 168-179. | | | | | | |
| | Publication entitled "Checkpoint Processing and Recovery: An Efficient, Scalable Alternative to Reorder Buffers" Haitham Akkary et al. IEEE Computer Society, November-December 2003, Pages 11-19. | | | | | | |
| | Publication entitled "Multi-view Memory to Support OS Locking For Transaction Systems", P. Bodorik et al., IEEE, 1997, Pages 309-318. | | | | | | |
| | Publication entitled "Indexing for Multiversion Locking: Alternatives and Performance Evaluation", Paul M. Bober et al, IEEE Transactions on Knowledge and Data Engineering, Vol. 9, No1, January-February 1997, Pages 68-84. | | | | | | |
| | Publication entitled: "Transactional Execution: Toward Reliable, High-Performance Multithreading" by Ravi Rajwar et al. IEEE Computer Society, November-December 2003, Pages 117-125 | | | | | | |
| | Publication: "Speculative Lock Elision: Enabling Highly Concurrent Multithreaded Execution" by Ravi Rajwar and James R. Goodman, Computer Sciences Department, University of Wisconsin-Madison, Madison, WI 53706 USA, rajwar@cs.wisc.edu , XP-001075852, published in IEEE Journal 1-12-2001, Pgs. 294-305. | | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | | | |
|---|--|---------|---------|------------------------------------|----------|-------------------------------|----|
| INFORMATION DISCLOSURE CITATION PTO-1449 | | | | ATTY. DOCKET NO. SUN-P9330CIP | | APPLICATION NO. 10/764,412 | |
| | | | | APPLICANT Marc Tremblay, et al. | | | |
| | | | | FILING DATE 23 January 2004 | | GROUP ART UNIT 2186 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE | |
| | 6,941,449 | 09-2005 | Ross | 712 | 35 | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
| | | | | | | Yes | No |
| | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| | "Structured Computer Organization" by Andrew S. Tanenbaum, Published 1999, pages 5, 7-8 | | | | | | |
| | "The Transaction Concept: Virtues and Limitations" by Jim Gray. Pro. Int'l Conf. Very Large Databases, Morgan Kaufman, 1981. pages 144-154 | | | | | | |
| | "Toward Efficient and Robust Software Speculative Parallelization on Multiprocessors" by Marcelo Cintra and Diego R. Lianos, PPOPP' 03 June 11-13, 2003 ACM 1-58113-588-2/03/0006 pages 13-24. | | | | | | |
| | "Microsoft Computer Dictionary" Fifth Edition, pub 2002, page 378 | | | | | | |
| | Publication: "Speculative Synchronization: Applying Thread-Level Speculation to Explicitly Parallel Applications" by Jose F. Martinez and Josep Torrellas, Dept. of Computer Science, University of Illinois at Urbana-Champaign, Urbana, IL 61801 USA, http://iacoma.cs.uiuc.edu , XP-002285169, published in ASPLOS X, 10-2002, Pgs. 18-29 | | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

| | | | | | | | |
|---|--|---------|----------------|------------------------------------|----------|-------------------------------|----|
| INFORMATION DISCLOSURE CITATION PTO-1449 | | | | ATTY. DOCKET NO. SUN-P9330 | | APPLICATION NO. 10/764,412 | |
| | | | | APPLICANT Marc Tremblay, et al. | | | |
| | | | | FILING DATE 23 January 2004 | | GROUP ART UNIT 2186 | |
| U.S. PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | NAME | CLASS | SUBCLASS | FILING DATE | |
| | 6,185,577 | 02-2001 | Nainani et al. | | | | |
| | 5,428,761 | 06-1995 | Herlihy et al. | 711 | 130 | | |
| | 5,835,764 | 11-1998 | Platt et al. | 718 | 101 | | |
| | 5,742,785 | 04-1998 | Stone et al. | 712 | 217 | | |
| | | | | | | | |
| FOREIGN PATENT DOCUMENTS | | | | | | | |
| EXAMINER'S INITIALS | PATENT NO. | DATE | COUNTRY | CLASS | SUBCLASS | Translation | |
| | | | | | | Yes | No |
| | | | | | | | |
| OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.) | | | | | | | |
| | Publication: "Transactional Memory: Architectural Support for Lock-Free Data Structures" by Maurice Herlihy, Digital Equip. Corp. Cambridge Research Laboratory, Cambridge, MA 02139, herlihy@crl.dec.com and J. Eliot B. Moss, Dept. of Computer Science, University of Massachusetts, Amherst, MA 01003, moss@cs.umass.edu , XP-000380375, published in Computer Architecture News, May 21, 1993, Pgs. 289-300 | | | | | | |
| | Publication: "Enhancing Software Reliability with Speculative Threads" by Jeffrey Oplinger and Monica S. Lam, Computer Systems, Laboratory, Stanford University, jeffop@stanford.edu , XP-002285168 published in SPLOS X, 10-2202, Pgs. 184-196 | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| EXAMINER | | | | DATE CONSIDERED | | | |

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.